# California Water Boards 6<sup>th</sup> Annual California Water Data Science Symposium

### **DRAFT Agenda**

Monday, June 28, 2021

Paya: The Water Story of the Paiute
Film Screening & Panel Discussion

### Please register to attend this film screening and panel discussion.

After registering, you will receive a confirmation email containing instructions on how to join the webinar.

Virtual Attendance for Non-registered Viewers: TBD

Time	Topic
Afternoon or Evening, TBD	Sign-on using information provided via your customized confirmation email
	Welcome & Logistics
	Film Screening
	Paya: The Water Story of the Paiute
	Panel Discussion

### California Water Boards 6th Annual California Water Data Science Symposium

### **Tuesday, June 29, 2021**

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Virtual Attendance for Non-registered Viewers: TBD

#### **Plenary Session**

Time	Topic
8:45 - 9:00	Sign-on using information provided via your customized confirmation email
	Symposium and Webinar Logistics
9:00 - 9:05	Greg Gearheart
	State Water Resources Control Board
	Welcome
9:05 - 9:20	E. Joaquin Esquivel
	State Water Resources Control Board
9:20 - 10:00	Keynote Conversation
	Ebony Harper
	California TRANScends
10:00 - 10:05	Break

## Session 1: From Data to Insight Examples of data visualization, exploration, and application

Time	Topic
10:05 - 10:25	Bay-Delta data sandbox: a web-based analytics and visualization
	environment for accessing and experimenting with integrated Bay-Delta
	data
	Emily Richardson, Jeffrey A. Hansen, Jeniffer Soto Perez, Tom Bergamaschi, Brendan F. Wakefield, Brian Bergamaschi
	United States Geological Survey

Time	Topic
40.25.40.45	DELVE: a cloud-based data management and visualization system for
	standardization, exploration, and collaboration
10:25 - 10:45	Mike Leech <sup>1</sup> , Laura Nickelhoff <sup>2</sup>
	(1) Environmental Science Associates, (2) Sitka Technology Group
	Untangling the multi-variable microplastics toxicity issue with an interactive
10.45 10.55	data exploration application
10:45 - 10:55 Lightning Talk	Scott Coffin <sup>1</sup> , Leah Thornton Hampton <sup>2</sup>
	(1) State Water Resources Control Board, (2) Southern California Coastal
	Water Research Project
	Groundwater Quality Map
10:55 - 11:15	Hung Bui
	State Water Resources Control Board
	Advancing sustainable groundwater management with open-source
	technology: from vision to reality
11:15 - 11:35	Christina Babbitt <sup>1</sup> , John Burns <sup>2</sup>
	(1) Environmental Defense Fund, (2) Sitka Technology Group
11:35 - 11:55	gspdrywells.com: a decision support tool to estimate well failure in critical
	priority groundwater basins
	Rich Pauloo¹, Darcy Bostic², Amanda Monaco³, Kaylon Hammond³
	(1) Water Data Lab, (2) Pacific Institute, (3) Leadership Counsel for Justice
	and Accountability
11:55 - 12:30	Lunch

# Session 2: From Insight to Action Example tools that support data-driven decision making

Time	Topic
12:30 - 12:50	Unnatural water balance and biological beneficial uses: a data driven
	framework to support flow management decisions
	Amanda Aprahamian¹, Aaron Poresky²
	(1) Orange County Public Works, (2) Geosyntec Consultants

Time	Topic
12:50 - 1:10	Water budget development: putting data to work
	Paul Shipman, Abdul Khan
	California Department of Water Resources
	OC stormwater tools: an open-source platform for stormwater asset
	inventory and performance modeling
1:10 - 1:30	Austin Orr <sup>1</sup> , Eric Rademacher <sup>2</sup>
	(1) Geosyntec Consultants, (2) Orange County Public Works
	Waste discharge requirement data management: past, present, future
1:30 - 1:40	TJ Middlemis-Clark <sup>1</sup> , Kristina Olmos <sup>2</sup> , Stephanie Torres <sup>3</sup> , Laurel Warddrip <sup>3</sup>
Lightning Talk	(1) Lahontan Regional Water Quality Control Board, (2) Central Coast
	Regional Water Quality Control Board, (3) State Water Resources Control
	Board
	Open-source dashboards for operational control at wastewater facilities
1:40 - 2:00	Ryan Shepherd <sup>1</sup> , Patrick McGrath <sup>2</sup>
1.40 - 2.00	(1) Databrook LLC, (2) San Luis Obispo Water Resource and Reclamation
	Facility
2:00 - 2:20	Beach and Bay Water Quality Program, County of San Diego
	Farnaz Farhang
	County of San Diego
2:20 - 2:35	Break

# Session 3: From Prediction to Protection Using machine learning to improve California's water resources

Time	Topic
2:35 - 2:55	Identifying meaningful water quality parameters for resource constrained
	local government's data collection using large open access state datasets: a
	Clear Lake case study, Lake County, CA.
	Liam Healey, Angela De Palma-Dow
	Lake County Water Resources Department

Time	Topic
	A day at the beach: enabling coastal water quality prediction with high-
	frequency sampling and data-driven models
2:55 - 3:15	Ryan T. Searcy, Dr. Alexandria Boehm
	Stanford University
	Leveraging big data to predict microplastics toxicity for aquatic organisms
	Scott Coffin <sup>1</sup> , Leah Thornton Hampton <sup>2</sup> , Bart Koelmans <sup>3</sup> , Merel Kooi <sup>3</sup> , Win
3:15 - 3:35	Cowger⁴
3.13 3.33	(1) State Water Resources Control Board, (2) Southern California Coastal
	Water Research Project, (3) Wageningen University, Netherlands, (4)
	University of California, Riverside
	Detecting cigarette butts from an eye in the sky
3:35 - 3:55	Lorenzo Flores
	San Francisco Estuary Institute
3:55 - 4:00	Daily wrap-up and adjourn
	Greg Gearheart
	State Water Resources Control Board

### California Water Boards 6th Annual California Water Data Science Symposium

### Wednesday, June 30, 2021

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#### **Plenary Session**

Time	Topic
8:45 - 9:00	Sign-on using information provided via your customized confirmation email
	Welcome and Webinar Logistics
9:00 - 9:05	Greg Gearheart
	State Water Resources Control Board

### Session 1: California Chapter of the Society for Freshwater Science

Time	Topic
9:05 - 10:25	TBD
10:45 - 11:00	Break

### **Session 2: Using Data to Address Water and Racial Inequities**

Time	Topic
11:00 - 12:40	Brief panelist presentations and panel discussion
	Panelists: Anna Holder¹, Jaimie Huynh², Tara Moran³, Walker Wieland⁴
	Moderator: Greg Gearheart <sup>1</sup>
	(1) State Water Resources Control Board, (2) CalRecycle, (3) California Water
	Data Consortium, (4) California Office of Environmental Health Hazard
	Assessment
12:40 - 12:50	Symposium wrap-up and upcoming events
	Greg Gearheart
	State Water Resources Control Board

### **Bay-Delta Data Sandbox Workshop**

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Time	Topic
1:30 - 4:00	Bay-Delta data access: a how-to workshop for accessing and analyzing environmental data in the U.S. Geological Survey Bay-Delta Data Sandbox
	Brendan F. Wakefield, Jeffrey A. Hansen, Emily Richardson, Jeniffer Soto Perez, Tom Bergamaschi, Brian Bergamaschi
	United States Geological Survey